FUN WITH HURRICANE IVAN – STUDENT WORKSHEET

NAME: _____ **CLASS:** _____ **DATE:** _____

Question 1) Tropical cyclone development is defined in stages. What are they?

_____
_____
_____

Question 2) Hurricanes are placed into "categories" based on a scale. What is the scale called and what are the categories in it?

_____
_____
_____

Question 3) What kind of damage does each category do?

_____
_____
_____

Question 4) Define the following terms:

Hurricane _____
_____

Eve _____
_____

Typhoon _____
_____

Tornado _____
_____

Coriolis Effect _____
_____

Barometric Pressure _____
_____

Surge _____
_____

Eye Wall _____
_____

HURRICANE IVAN DATA ANALYSIS

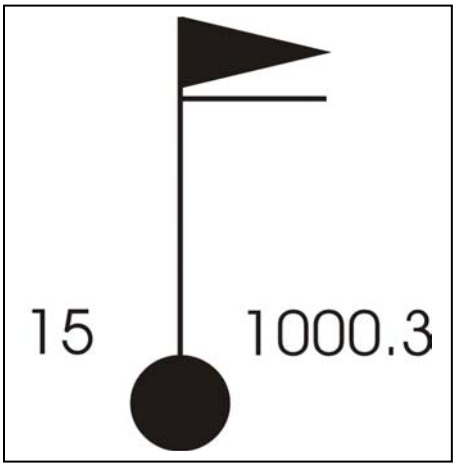
Hurricane Tracking: The center of the rotation, located in the middle of the eye, if there is one, marks the center of a tropical cyclone. To plot a hurricane's track, you need the latitude and longitude of the storm's center at a succession of times. The table below gives these coordinates for Hurricane Ivan in two-hour intervals. On your hurricane tracking chart, try to plot Hurricane Ivan's track.

Time	Date	Latitude	Longitude
1pm	9/15/2004	27.8 N	88.2 W
4pm	9/15/2004	28.4 N	88.3 W
6pm	9/15/2004	28.8 N	88.2 W
8pm	9/15/2004	29.0 N	88.2 W
10pm	9/15/2004	29.1 N	88.1 W
12am	9/16/2004	29.7 N	87.9 W
2am	9/16/2004	30.2 N	87.8 W
4am	9/16/2004	30.9 N	87.7 W
7am	9/16/2004	31.6 N	88.7 W
10am	9/16/2004	32.0 N	87.5 W
1pm	9/16/2004	32.6 N	87.1 W
1pm	9/16/2004	32.6 N	87.1 W

Using the information in the table above, track Hurricane Ivan's movement through the Gulf of Mexico using the tracking chart provided.

Question 5) At what time did Hurricane Ivan make landfall? _____
Question 6) What was the date Hurricane Ivan made landfall? _____

Weather Maps: On a weather map, meteorologists plot the temperature, pressure, and wind observed at different weather stations using a 'station plot'. The wind barb (or flags) shows the direction and speed of the wind. Each full barb represents 10 knots, half a barb is 5 knots, and a flag is 50 knots. The stem of the flag points in the direction from which the wind is blowing. A knot is a unit of measure for speed; to convert knots to miles per hour, divide the wind speed in knots by 1.15. The temperature in Celsius is on the left side of the plot and the pressure in millibars is on the right.



Using the picture in the box to the right answer the following Questions:

7) What is the wind direction _____ ?

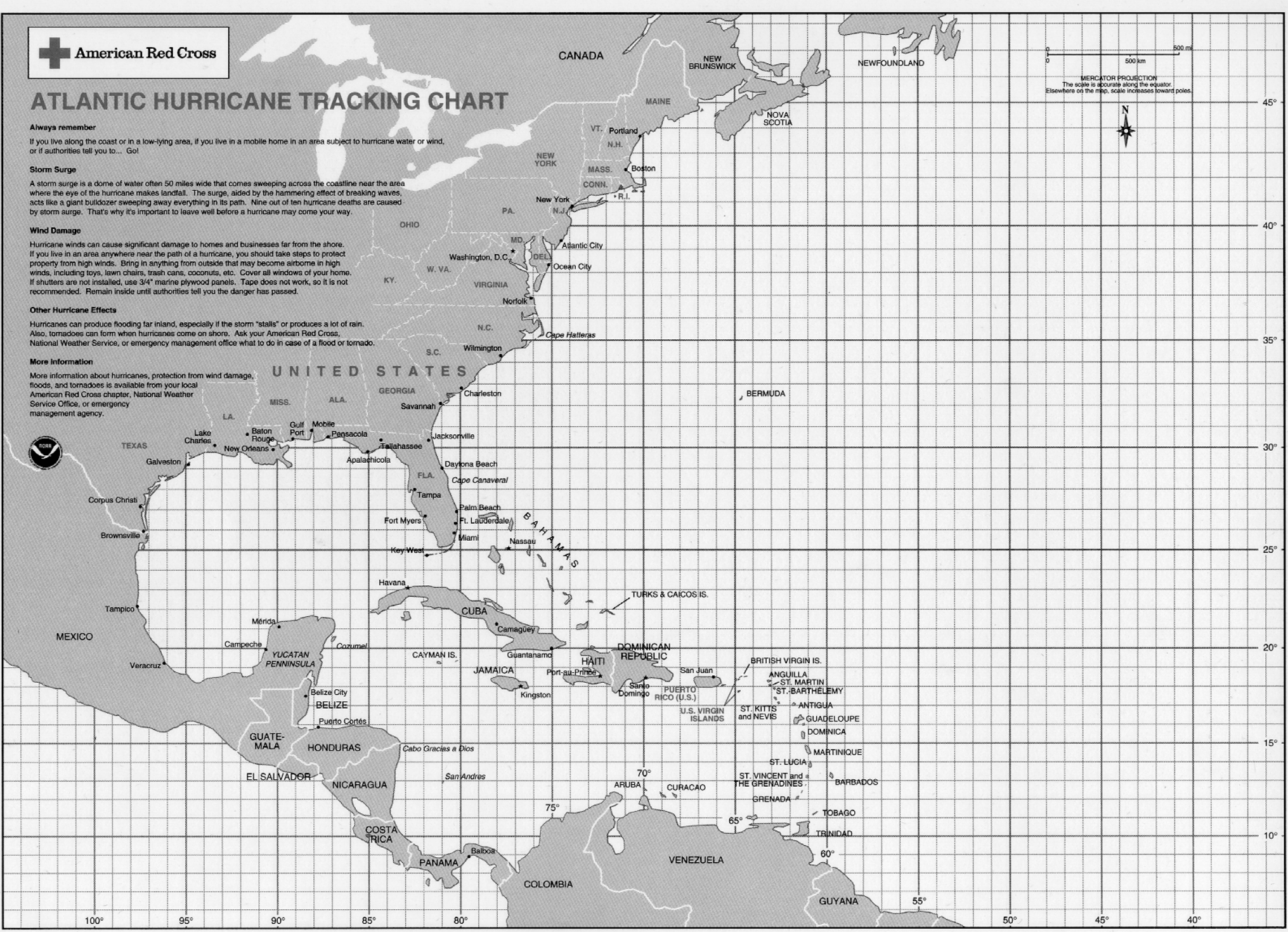
8) What is the speed in knots _____ ?

9) What is the speed in miles per hour _____ ?

10) What is the pressure _____ ?

11) What is the temperature in Celsius _____ ?

12) What is the temperature in Farhenheit _____ ?



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ATLANTIC HURRICANE TRACKING CHART